

Susceptibility to Asthma Controlled by Modifying the Environment

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In a just-completed, five-year study in Cleveland-area, water-damaged homes of asthmatics, EPA Office of Research and Development (ORD) researchers, in collaboration with Case Western Reserve University Medical School, established that specific molds were statistically more common in water-damaged homes. When the molds were removed from these homes, the children had a significant decrease in asthma symptoms and symptom days. The result was a statistically significant tenfold reduction in the use of medical interventions (i.e., emergency room visits or hospital admissions) for children living in these homes.

In a just-completed study in Cincinnati, the relationship between mold concentrations and the development of wheeze and/or rhinitis in infants was tested. To measure exposure risk, EPA scientists developed the EPA relative moldiness index© or ERMI© based on the measurement of the concentration of 36 species of molds in floor dust samples by using EPA's patented "Mold Technology." The ERMI© values were used to accurately predict the risk for infants developing respiratory illness.

By applying these findings and techniques, we should be able to reduce the asthma burden in the US, reduce the use of medical care, and save lives.

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